

THE COOLUM BOARDWALK – SUSTAINABLE COMMUNITY & GOVERNMENT PROJECT DELIVERY

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Abstract

Stage One of the Coolum Boardwalk, was officially opened by Maroochy Shire Mayor, Alison Grosse OAM on Friday 22 March 2002. Stage One comprises a 195 metre long and 2.4 metre wide timber structure that provides joint pedestrian and recreational bicycle access and replaced a dangerous narrow bitumen path

The Boardwalk project was a joint venture that was driven strongly by the local community, and jointly funded by the Coolum Beach Ratepayers and Progress Association (CBRPA), Maroochy Shire Council, and the Queensland State Government.

The boardwalk structure was designed to minimise impact on a sensitive landscape area in keeping with the environmental value of the Coolum area. It was also designed to endow the area with a signature attraction that would augment strong tourism growth for local businesses and the local population, and to equally provide an equitable recreation facility for pedestrians and cyclists, that conforms with the highest disabled access standards.

At concept stage the project included the provision for community employment through the Queensland State Government Community Jobs Plan Scheme. Of the participating number of 15 CJP participants, 7 were able to secure full time employment. This was achieved within a depressed coastal employment area.

As the project evolved it developed into an excellent example of fluid committee governance and communication with the involved participants: State government, Local government and the community.

These parties worked together to achieve a number of positive outcomes which included local employment, community project involvement and community ownership as well as the provision of a safe, aesthetically appealing and environmentally sound infrastructure.

Fundamentally the project reinforced the emerging need for government to work with and empower local communities to achieve their visions.

Key Words: Empowered community; disabled access; boardwalk; timber;

Introduction

This paper will provide an outline six significant elements involved in the delivery of the Coolum boardwalk project. These are :

- Concept development & planning
- Features of the boardwalk
- “Breaking the Unemployment Cycle” – State Government Programs
- Design & site challenges
- Project Partnerships
- Outcomes realised & learnings

BOARDWALK DEVELOPMENT PROCESS

Project Development

The idea to build some form of boardwalk structure that could replace the existing narrow and dangerous bitumen path that links Coolum Beach to Point Perry has been resident with a number of people within the Coolum community for some time. For various reasons however the vision had not been progressed, despite a high level of usage of the area by both residents and tourists.

In October of 2000, a meeting between representatives of the Department of Education, Training and Industrial Relations (DETIR) and Maroochy Shire Council was held, where the concept of building a boardwalk, while utilising local unemployed people was discussed. Following this approaches were made by the Divisional Councillor to the Coolum Beach Ratepayers and Progress Association (CBRPA) to assist in the development of a boardwalk concept design.

The initial development of the concept designs was driven by the CBRPA, who raised funds from local businesses, and

environmental design; Community Jobs Plan

appointed Archibetts Architects to develop a number of concept designs for public consultation in May 2001.

On the basis of the positive public feedback for the concept designs, and due to significant safety concerns regarding pedestrian access along the David Low Way (the subsequent location of the facility), the community vision for the boardwalk and the developmental work undertaken by the community, the project received in-principle support by Maroochy Shire Council in March 2001.

The Maroochy Shire Council submitted a Community Jobs Plan (CJP) application to employ 15 people for a twenty week period. The total value of the application was around \$180,000. The project received approval from DETIR in July 2001 and was similarly endorsed by the Maroochy Shire Council in the 2001/02 budget, with a budget allocation of \$370,000.

Project Objectives

The projects major objectives were to:

- Construct a fully compliant elevated timber boardwalk within an environmentally sensitive area.
- Utilise employment generation schemes to assist in the construction.
- Engage with the community fully through the design and implementation phases.
- Provide a structure that facilitated community ownership and pride.

Project Concept

The project concept was thus :

- Developed by the community.
- Endorsed by State Government with the granting of Community Jobs Plan (CJP) funding for local area employment generation.

- Project managed and significantly funded, as part of an inclusive and consultative process with the local community, by Maroochy Shire Council.

Project Committee

A project committee was formed to oversee the design development, chaired by the MSC, with input from:

- Maroochy Shire Council
- Cr Bruce Dunne
- Namtec Training Group representatives
- Archibett Architects
- Cardno MBK Engineers
- CBRPA

Construction Period

Boardwalk construction commenced in October 2001 and over a period of five months the local community, local CJP participants, the Department of Employment and Training and Maroochy Shire Council facilitated the completion of the Coolum Boardwalk, Stage 1. The structure has since become a signature attraction, as well as an equitable and safe dual access facility within the Shire.

FEATURES OF THE BOARDWALK

The following elements were incorporated into the design of the boardwalk, many of which demonstrate a commitment to environmental and societal sustainability:

- equitable access for all users through ramps designed to latest disability access codes
- viewing / seating areas
- public meeting space at mid point
- stainless steel balustrades and handrails to comply with disability access codes and the BCA

- route chosen to minimise environmental disruption
- improved safer access along eastern side of David Low Way from south of surf club to Point Perry
- removal of existing tarmac path and revegetation, with endemic species of this area, improving condition of the Norfolk Pines' root environment
- minimal tree loss, with no loss of any trees of significant value, through the design of the boardwalk (i.e. Norfolk Pine, Pandanus)
- sponsorship of elements by local community groups
- solar lighting with potential to connect to main electricity grid
- public art and architecture features

“BREAKING THE UNEMPLOYMENT CYCLE” – STATE GOVERNMENT PROGRAMS

The project became a platform for the instigation of two State Government funded employment initiatives.

Community Employment Assistance Plan (CEAP)

Firstly, a CEAP was awarded to Namtec, (Nambour Training for Employment Centre Incorporated) a Sunshine Coast based training organisation, for the purposes of undertaking all associated metalwork for the structure. In a relatively short fifteen week period, the 15 students produced over 150 stainless steel footing stirrups, used to connect all piers and fabricated over 300m of stainless steel balustrade using up to 4km of 10mm stainless steel rod. Both the quality of the work and the enthusiasm of the participants for the project was notable.

The group achieved modules of the Certificate I in Engineering, Welding and Fabrication through off-site construction in the Nambour workshop, of the stainless steel

footings and balustrade detailing for the boardwalk.

Community Jobs Plan (CJP)

The State Government also contributed nearly \$180,000 to the Community Jobs Plan (CJP) with NAMTEC (Nambour Training for Employment Centre Incorporated) coordinating the local employment and training aspects.

The funds allowed 20 weeks of paid work for 15 long-term unemployed local people to assist in the construction of the 200 metre long boardwalk. (NAMTEC is a registered training organisation providing young people with life, personal development and industry skills, to enable them to feel valued by their society and to increase their chances of employability. A key role of this is to provide accredited and non-accredited training for disadvantaged young people).

The CJP funding provided a traineeship of national based competency in selected horticulture and landscape modules through their involvement, as well as training with landscape and horticulture practices such as:

- on-site clearing of all weed species
- propagation of selected endemic species from the Coolum Boardwalk area
- transplanting trees
- construction of dry packed-rock retaining walls to reduce erosion
- endemic planting revegetation works to assist in prevention management of further erosion
- traffic control management
- erection of protective fencing for the existing Norfolk Pines
- carpentry assistance in the construction of the timber boardwalk to the Maroochy Shire Council work crews

DESIGN & SITE CONSTRAINTS

Environmentally sensitive area.

The challenge with the boardwalk was to construct a structure that would minimise disruption to significant trees and vegetation, but which still complied with relevant disabled standards, and worked within the constraints of the local topography and slope stability.

The following key points illustrate the environmental elements of the site, which the boardwalk construction sought to complement:

- The boardwalk site area had been long neglected over a number of years and was situated within an area that consisted of a steep incline running to a cliff above the water which was overgrown with many weed species
- The site been used to dump road construction waste materials
- Slopes were eroding in exposed areas due to uncontrolled stormwater discharges
- Soil profile and stability was unknown
- The site contained many significant trees along the route including natives such as acacias and pandanus and local Norfolk Pine sentinel trees which give significant identity to the Coolum area.
- Throughout the design and implementation phases effort was expended on ensuring that the environmental value of the area was conserved and complemented by the structure.

Equitable Access Issues

The original concept design was developed to ensure compliance with AS1428 part 1; Disability Access Provisions. However in the period between the concept and the financial design, the Maroochy Shire Council formally adopted AS1428 Part 2 (the Enhanced Disability access standards) as the basis for all infrastructure provision. This had a significant impact on the final structure as the

boardwalk is required to climb around **m over its total length of 370m.

With a maximum ramp slope of 1:14 over 6m length, the structure had to be re-designed to comply with these provisions, while still avoiding significant vegetation while running along the side of a steep cliff section with some relatively unstable areas. It is a credit to the project architects, Archibett, and the project engineers, Cardno MBK, that they were able to design a fully compliant and visually striking structure within a four month period.

An interesting outcome of the design was that the structure cannot be designated as a bikeway as there are significant conflicts between the Austroads bikeway requirements and the disability access standards.

How did the project address environmental issues?

A range of initiatives were implemented to address the various site environmental issues that can be summarised as follows:

- Full site vegetation survey undertaken by local TAFE environmental students – this included mapping of major vegetation in the local area.
- Full site geotechnical investigation undertaken
- Consultation undertaken with local wildlife experts to identify significant trees used by local birdlife
- Boardwalk designed to minimise impact on the ground (i.e. avoid root systems; vegetation etc.)
- Boardwalk designed to bridge major unstable areas and to avoid further slope erosion
- Route selected to avoid impacting on major trees and Boardwalk elevated above Norfolk Pine roots to avoid damage to roots
- Extensive selective site clearing undertaken by NAMTEC CJP employees

- Slope stabilisation treatments undertaken including planting of ground cover; utilisation of geotextiles materials and rip rap
- Stormwater pipes exposed and energy dissipaters installed to reduce possible erosion
- Major trees identified, tagged and their roots exposed to ensure that disruption was minimised during boardwalk construction, with selective pruning undertaken prior to works to minimise tree damage
- Construction work practices also modified to avoid vegetation damage (eg. hand digging, use of long reach excavators etcetera)
- Agreement reached with local community group to maintain plantings post construction
- Norfolk Pines planted to replace those already dying (i.e. prior to construction)

PROJECT PARTNERSHIPS

Governance Model

The Coolum Boardwalk project developed from a community vision for a recreational structure that would be a valuable amenity within the local area and which would replace an unsafe pedestrian pathway near a busy traffic route.

Maroochy Shire Council contributed to the project via a project development and management role. The Council also facilitated State Government Community Jobs Plan (CJP) grant funding and employment opportunities, coordinated design and construction for the project; and contributed Council funds. These contributions built upon the substantial efforts of a number of vital community groups working under the umbrella of the Coolum Beach Progress and Ratepayers Association. In the conceptual stages of the Coolum Boardwalk project this group undertook much of the developmental work regarding preliminary design, fundraising and public

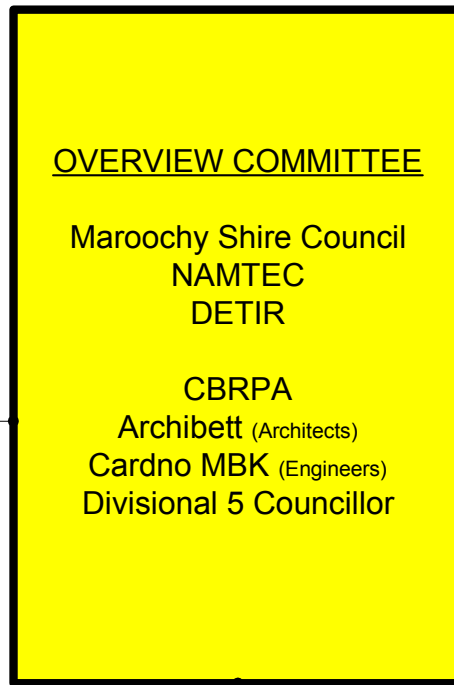
consultation. Together Maroochy Shire Council and the CBPRA built a vision, which came to fruition with the completion of the Stage 1 of the Coolum Boardwalk, in March 2002.

These efforts were both recognised and appreciated by the local community for the long-term environmental planning afforded to the boardwalk structure within the local Coolum environment.

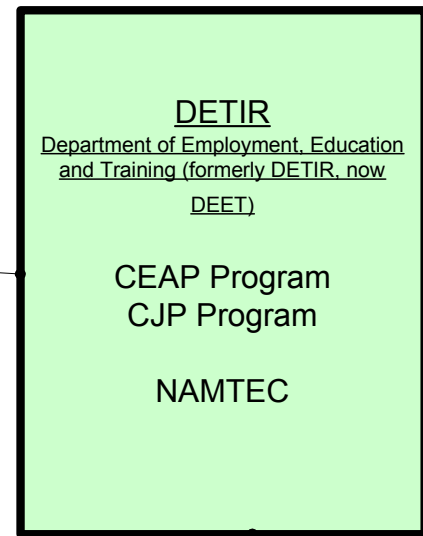
The Governance model can be outlined as follows, in the following model and described in more detail overleaf :



Community and Council



Local and State Government



- Raised funds for concept
- Engaged Archibett
- Empowered and engaged other groups and business community

- Concept Design
- Consultation
- Marketing
- Final Design
- Sign off

- CJP - Labour components
- CEAP - Steel Fabrication
- NAMTEC - Registered Training Organisation

Project Coordination and the Role of the Maroochy Shire Council

Maroochy Shire Council have acted as the projects sponsor and coordinator through the process, with strong support provided from both DETIR and the Coolum Beach ratepayers and Progress Association, and have committed nearly \$370,000 towards the design, construction, implementation and provision of materials for the boardwalk.

This project has been coordinated by Council's Asset Construction Branch with support from Strategic Planning Services who together have provided the expertise, direction and supervision for the project management and design. The majority of the complex construction was undertaken by the Council's Bridge Construction Unit, who were able to work alongside and mentor many of the CJP participants.

Archibett Architects, together with Cardno MBK designed the full structure in a compressed time frame of less than four months.

This project has been one of Council's fastest implemented major projects with the development from concept design through construction detailing to Stage 1 implementation occurring in just over a year.

Project Committee

The project committee needed to make decisions that were both effective, balanced and quick to meet the timeframes set to acquit the CJP program and deliver the structure. By working cooperatively and flexibly decisions on such issues as widths, heights, route locations and other site specific decisions were able to be made at each meeting, with full input from all members.

Community Engagement

The CBRPA have been the main community drivers of the project from inception, raising funds through activities such as manning bee tents, holding concerts and lobbying local businesses. The CBRPA successfully applied for a \$37,000 grant to incorporate public art into the provision of solar lighting within the structure, and acted as the conduit for other

umbrella community groups from within the Coolum area.

Engagement with the community was a continuous element of the project development process. The Committee Governance structure, which was developed within this process, evidences the respect, recognition and participation of many vital community groups in the project.

Community Ownership And Pride.

The community involvement witnessed through both the CJP program and the CBRPA's concept development of the boardwalk, public consultation activities, fundraising and ongoing contributions to the project ensured that the community endorsed the structure. Opening Day saw many of these vital participants claim the structure as their own, and support the continuing development of the project through Stage 2.

Simple acts, such as the local surf club providing free facilities for both the CJP participants and Council employees to undertake training and use lunch rooms for the project duration illustrate the high level of support.

Since completion of stage one, community members have been actively maintaining the landscaping on their own initiative.

Consultants Role

Both Archibett Architects and Cardno MBK contributed significantly to the project delivery. By working flexibly and cooperatively within the governance framework, they were able to interact with both the community and government to design and deliver a quality and innovative structure in a cooperative manner.

LEARNINGS & OUTCOMES

What We Could Have Done Better

As a result of the compressed timeframe some of the community groups felt that the consultation was not extensive enough, particularly with regard to the site vegetation management issues. This was certainly

acknowledged by the project management committee, however with a need to make firm decisions and move forward meant that not all parties could be constantly addressed. With the benefit of a hind sight, a higher level of representation could have been sought from other groups during the design phase.

The Skeleton For The Body

The boardwalk has been described as the skeleton upon which the flesh will be added. This can already be seen in so many varied outcomes, such as :

- Training & employment generation for local unemployed people
- Significant tourist facility – the boardwalk is already a popular destination and a wedding was even held on the day of the opening
- Safe route for access to the spectacular Point Perry lookout
- Platform for local art classes
- Opportunity to clear & revegetate a degraded area for local environmental groups
- Recreational walking link
- Provide access to views to members of the disabled community
- Future provision of solar energy through collector / lighting system
- A structure to unify the local community through it's funding and development process
- Artistic piece, through the development of public art inclusions

And above all, the boardwalk is a structure that allows for contemplation and community gathering.

The Future

Stage two of the boardwalk will commence in October 2002 and will complete the full link to

Point Perry. Again the Maroochy Shire Council has successfully been awarded a CJP program by DETIR to an allocation of approximately \$140,000 to provide training for long term local unemployed people, and Namtec have been awarded a CEAP program grant to provide training for young people, which will provide fabrication of the steel elements. The Maroochy Shire Council have allocated \$4000,000 in the current financial years budget to complete the project.

Maroochy Shire Council have also just been made aware that the Federal Government have provided a grant of \$82,000 towards the project under the Regional Solutions Funding program, which will be used to fully light the structure to code and to assist with the provision of solar lighting along the structure.

Yet again the awarding of these funds demonstrates the high level of interest in the project from all levels of government, and demonstrates that the benefits of the project have multiple outcomes for the wide range of stakeholders.

Funding Summary

By the completion of stage two, the boardwalk will have received funding from the following areas to the following amounts :

Maroochy Shire Council
- \$770,000

Queensland Government (CJP)
- \$320,000

Federal Government (Regional Solutions Funding)
- \$82,000

Community Gaming Fund
- \$38,000

Coolum Community Funds (CBRPA)
- \$20,000

Total funds allocated
- \$1,230,000

IT is worth noting that almost 50% of the funds provided have come from areas other than the Maroochy Shire Council, illustrating the many stakeholders involved.

Partnerships In Action.

This project provides an excellent example of State Government, Local Government and the community working together and reinforces the emerging need for government to work with and empower local communities to achieve their visions.

Sustainability for future infrastructure provision encompasses environmental, economic and more importantly, full community acceptance and interaction.

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Archibett Architects

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- Walter Betton

Cardno MBK Consultants

- Paul McDonald
- Greg Woffenden

Namtec Training

- Liz Berquier
- Di Matthews
- Ross Shepherd



COOLUM BOARDWALK
BEFORE **AFTER**

Author Biography

Andrew Ryan is the Manager of the Asset Construction Branch with the Maroochy Shire Council. Asset Construction manage a Capital Works program of around \$16m annually and deliver up to 480 projects.

Andrew is an ex Tasmanian who commenced his career in 1985 with Munro Johnson & Associates in Brisbane, and worked across a range of projects within Brisbane and central Queensland. After migrating back to Tassie in the early 90's to start a family, he spent 9 years with the Hobart City Council. After enduring the cold for a decade, Andrew & his family moved back to sunny Queensland in 1999 and now can be found most weekends searching for that elusive perfect wave.

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